

**Necessary but Not Sufficient: Redefining the High School
Experience in Arizona**

**A report by the Arizona Ready Graduation Task Force
Spring 2014**

DRAFT

Executive Summary

Introduction

Arizona, like every other state in our country, is struggling with the problem of students leaving high school prior to receiving a diploma. For the graduating Class of 2012, nearly a quarter of the students who began attending public high schools in the fall of 2008 were not celebrating with their peers on graduation night. This translates into over 18,000 young Arizonans who dropped out of school sometime during their high school careers. And this is for just one graduating class! While some of these students will return to the public school system to complete their educations, and others will earn an equivalent degree, many more will be set adrift in a society and an economy in which earning a high school diploma is increasingly the **minimum** requirement for leading a satisfying and productive life.

Graduation Rates and Trends

Although the 2012 on-time graduation rate of 76.7% reflects a slight upward trend for the past seven years, overall rates have fluctuated from year-to-year and have hovered around the 75% to 78% levels for the past five years, despite all efforts by the education community to solve the dropout problem and increase graduation rates. But graduation isn't the end of the story. Success after high school often hinges on a sense of "college- and career- readiness" and many students fall short of that, as well.

Arizona's high school graduation problem affects students in all demographic and educational classifications, but some are more affected than others. Hispanic, African American, and American Indian students, as well as those who are Limited English Proficient, all have significantly lower on-time graduation rates than their peers. For example, for the Class of 2012, less than one-fourth of Limited English Proficient students graduated on time.

The Costs to Individuals and Society

The costs to the individual of not graduating from high school are both serious and long-term. A dropout will earn significantly less over his or her lifetime than those who complete high school, and is more likely to suffer poor health and be involved in the criminal justice system than high school graduates.

The dropout problem affects more than just the individual who makes the decision to leave school prior to earning a diploma. In our state, for one graduating class alone, the lost lifetime earnings for students who dropped out of school has been estimated to be over \$3 billion dollars. This is lost income that could be used to fuel the state economy through personal expenditures and tax revenues. Moreover, it is estimated that the state could save millions of dollars in health care and crime-related costs if the graduation rate were improved only slightly.

Demographic and Economic Challenges

Two factors have combined to make the dropout issue in Arizona even more critical than it might have been in the past. One of these factors is the rapidly changing demographic profile for the state, while the other is the challenge of the "new economy", one based on economic globalization and the worldwide technological revolution.

Arizona, like many states in the southwestern part of the U.S., is becoming increasingly Hispanic in terms of its demographic makeup. During the period of time between 2001 and 2010, Arizona's Hispanic population grew at a rate that was two and one-half times that of its non-Hispanic population. Hispanics now make up nearly one-third of the state's total population and, more importantly to the educational community, approximately 47% of all children and young people below the age of 19. Indeed, Hispanic students now make up the single largest racial/ethnic group in grades PK-7 in Arizona's public schools. If Hispanic students are the fastest growing segment of the public school population, and if, as has been shown, Hispanic students historically have suffered

lower graduation rates than the student population as a whole, then both the education community and state educational policymakers should be concerned and prepared to take action.

The other factor driving a sense of urgency with regards to the related issues of on-time graduation and the relative preparedness of Arizona's high school students for college and/or careers is what might be called the "new economy". Forty years ago a student who dropped out of school could usually find a job, often a job that paid well and provided a chance for advancement. High school graduates in the 1970s could look forward to easy access to college or employment with career potential. With the advent of economic globalization and the worldwide technology revolution, however, the kinds of jobs previously available for high school dropouts have virtually disappeared.

In fact, even a high school diploma is no longer a guarantee to a job with a future. It is now estimated that within the next five years, nearly two-thirds of all jobs in Arizona will require additional postsecondary education or skills training. What we may be seeing is the day when earning a high school diploma is a **necessary** step for an individual in our society, but perhaps not a **sufficient** one for finding employment that leads to economic security.

Arizona Ready and The Graduation Rate Task Force

Fortunately, the state of Arizona has taken significant steps to address both the graduation rate and the college/career readiness issues. With the creation of the Arizona Ready Education Reform Plan in 2011 by Governor Jan Brewer, the state launched a new set of educational reform efforts.

One of the five goals in that plan is to increase the four-year (on-time) graduation rate to 93% by 2020, ensuring that "all graduates are college and career ready". Meanwhile, the Governor re-formed Arizona's P-20 Council to become the Arizona Ready Education Council. To further this goal, the Arizona Ready Council created the Graduation Rate Task Force, comprised of leaders from the fields of education, business, and human services. Over the following two years, the task force met and focused its efforts on identifying a set of strategies and programs that have proven to keep students engaged throughout their PK-12 education and prepared for college and career choices. In the end, the task force chose to focus on seven strategies that the members felt could be most effectively implemented in the state of Arizona. The seven strategies included:

1. Early student awareness and planning for a variety of options
2. Early intervention through an Early Warning Data System
3. Honing in on more specific interest and deepening relevant skills
4. Multiple pathways for core academic credit
5. Flexible, high quality school options for recovered drop-outs
6. Counteract two major causes of academic failure: summer learning loss and lack of student engagement
7. Higher quality pre-school and early primary school experiences

Taken as a whole, the seven strategies can certainly be seen as a set of resources, services and interventions designed to help students who otherwise might be in danger of dropping out of school, but they can also be viewed as comprehensive vision to redefine high school that will help **all** students in the public school system, regardless of their dropout status, educational plans or career goals, achieve both a necessary and sufficient High School diploma.

Graphic Representation On This Page

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Necessary but Not Sufficient: Redefining the High School Experience in Arizona

Graduation marks an important milestone in the lives of most high school age students in this country. It is a time of celebration. It is a time to enjoy a sense of accomplishment and look forward to the future, a future that might include college, advanced technical training or the beginnings of a career.

Imagine graduation day at any Arizona high school, with students looking back at their last year, last four years, last six years: What do we want them to see? Clear expectations, academic rigor with supports to help struggling students succeed, plenty of opportunities to explore and pursue different pathways of interest, plenty of information about what to expect when they finish their senior year, intellectual and practical skills to get and keep a job, and a solid foundation to build any future choices upon.

In many cases, Arizona students are getting just that. Unfortunately, however, for far too many students in the state of Arizona, high school graduation is a dream that has not been, and may never be, realized. For these young people, the future looks dramatically different. It is a future that, in most cases, does not include the opportunity to attend a two-year or four-year college, further technical training in an area in which they were prepared during their high school years, or a job with any chance of advancement.

Arizona Graduation Rates and Trends

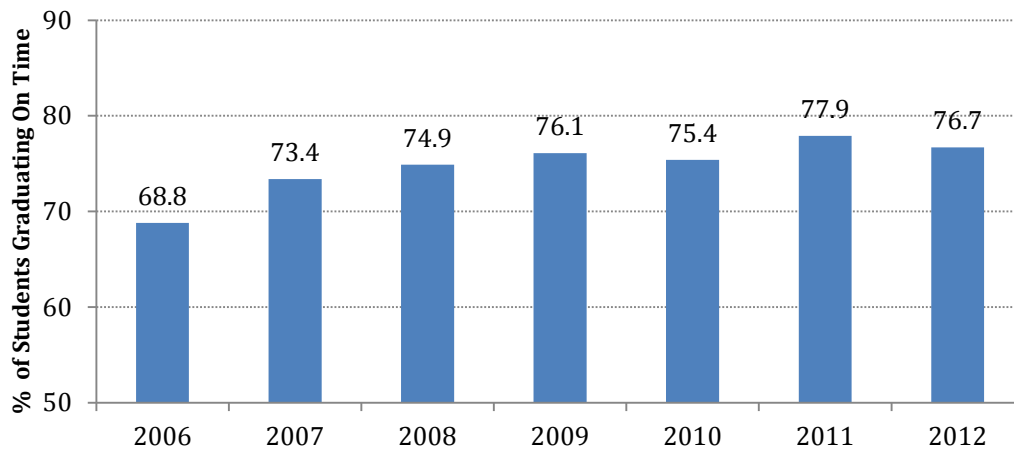
Today in our state, when students come to their first day of school in 9th grade, they can look at their class and know that almost one in four of their classmates' names will not be called to come forward and receive a high school diploma four years hence.

While graduation rates have been calculated using different methods over time and in various localities, the method used in the state of Arizona is based on the proportion of public high school freshmen that graduate with a regular diploma 4 years plus a summer after starting 9th grade. Thus, it provides a measure of the extent to which public high schools are graduating students within the expected period of 4 years, i.e. "on-time". The Arizona Department of Education also calculates the proportion of the 9th grade cohort that graduates in 5 years, but for the purposes of this document, the 4-year graduation rate will be used for all references, tables and graphic displays.

For the Class of 2012, the graduation rate for all Arizona high schools stood at 76.7%. What this means is that, of the 77,247 students who were in the cohort group for the Class of 2012, 23.3%, or 18,039 students, failed to graduate in the expected four-year period¹.

Looking at the historical data on graduation rates in the state, we see the yearly totals only slightly trending upward from 2006 to 2012, despite the education community's efforts to keep students in school and increase the numbers and proportions of students receiving a high school diploma.

Figure 1. Arizona 4-year Graduation Rates - 2006- 2012.

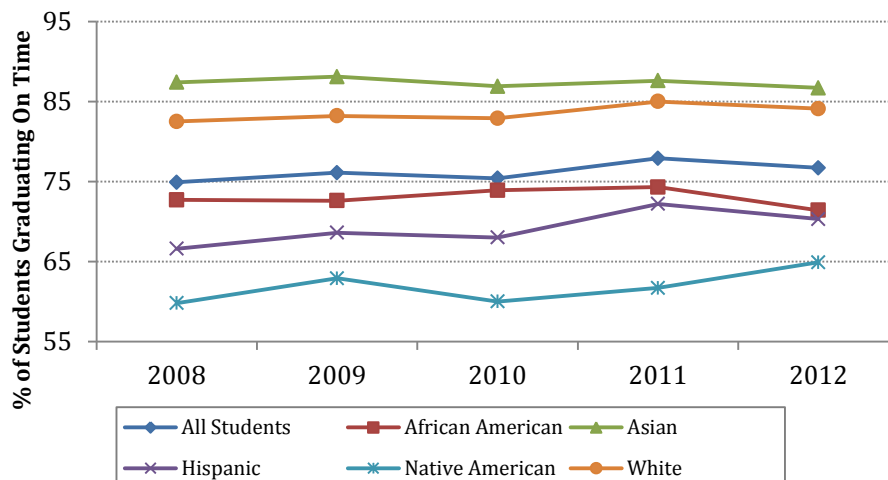


Source. Arizona Department of Education

While the dropout problem in Arizona cuts across all segments of the school population, it affects some student subgroups more than others. Graduation and dropout rates vary significantly among counties, across ethnic/racial classifications, socioeconomic groups, and other demographic student characteristics.

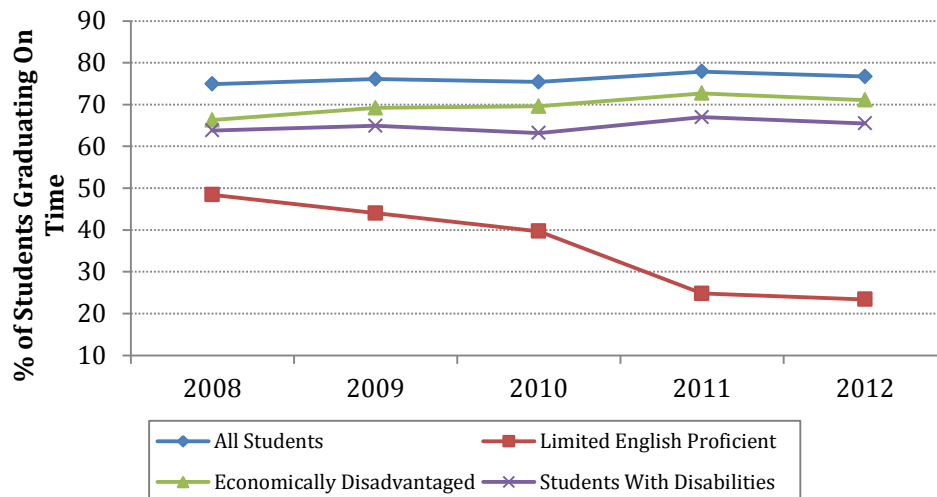
Statewide, Native American, Hispanic and African American students, and students who are English Language Learners have significantly lower graduation rates than the average for all students. In 2012, compared to the 4-year graduation rate all students, the rate for Hispanic students was 6.4 percentage points lower, for African American students it was 5.3 points lower, and for Native American students was 11.8 points lower. The graduation rate for students who are limited English proficient (LEP) should be of particular concern for policymakers. In 2012, less than 1 in 4 students identified as limited English proficient graduated on time. The difference between the 4-year graduation rate for LEP students and all students that year was over 50 percentage points, and the rate had steadily declined over the five-year period between 2008 and 2012².

Figure 2. Arizona 4-year Graduation Rates for Racial/Ethnic Groups – 2008 - 2012



Source. Arizona Department of Education

Figure 3. Arizona 4-year Graduation Rates for Select Demographic Groups – 2008 - 2012



Source. Arizona Department of Education

It is obvious that the relatively slow rate of improvement in the graduation rate in Arizona over the past 5 to 10 years is a serious issue and that the disparity in educational success among various subgroups of the public school population must be addressed. This is not just an educational issue, however. There are real economic costs to both the high school dropout and the larger community in which he or she lives.

The High Cost of Dropping Out

The impact to the individual student of not completing high school is both serious and long term. In Arizona, a student who drops out of school before graduating earns nearly \$7,500 per year less, is more likely to report poor health later in life, and is much more likely to be institutionalized than their peers who finish high school³.

But dropping out of school affects more than just the individual student. For example, lost earnings for the 25,600 students in Arizona who did not graduate from high school in 2011 total an estimated \$3.1 billion. This is income that is lost to the state economy both as potential expenditures by wage/salary earners and as lost tax revenue. In addition, Arizona could save as much as \$265 million in health care costs over the lifetimes of each class of dropouts had they earned their diplomas. Finally, Arizona could see a combined crime-related savings and additional revenue of about \$184 million each year, if the male high school graduation rate increased by just 5 percent.⁴

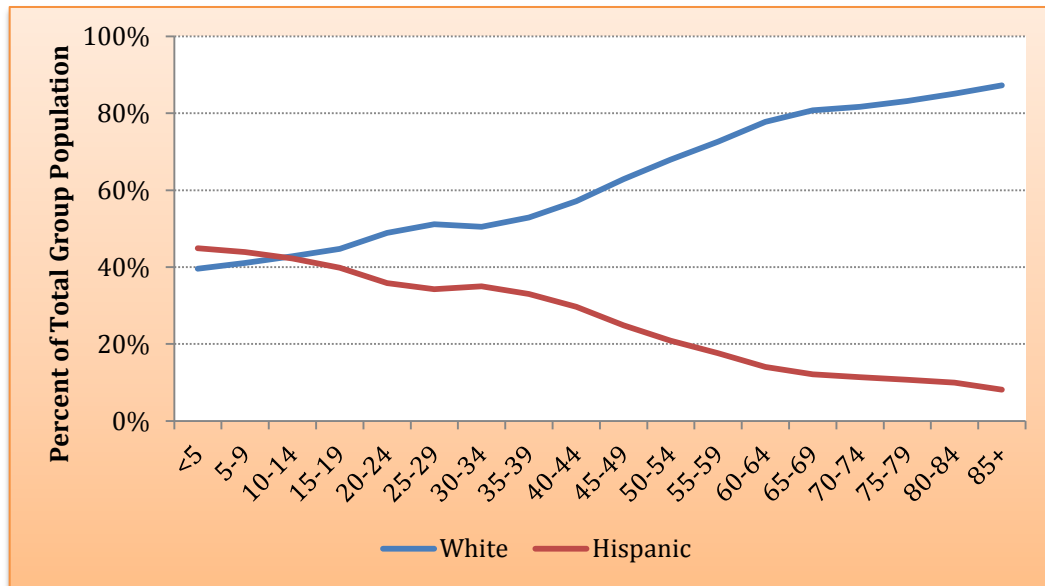
While the costs of dropping out of school are high now, two current trends, one demographic, the other economic, are combining to make the potential costs and consequences of students in our state either not graduating from high school, or graduating but not being prepared for college or a career, even more serious.

Dropouts and Demographics in Arizona

The makeup of Arizona's population is different in a number of ways than in the U.S. as a whole. While the proportions of White, Black and Asian Pacific Americans is lower when compared to the rest of the nation, Arizona has nearly twice the proportion of Hispanics and four times the proportion of American Indians. Data from the U.S. Census Bureau indicate that, in 2010, 30% of all Arizona residents were Hispanic, while 4% were American Indians.

In terms of age distribution, Arizona more closely resembles that of the national population in terms of proportions of individuals in each age span, but, when the data is disaggregated by racial and ethnic group, a different picture emerges. As can be seen in Figure 4, following, the younger age spans are becoming increasingly Hispanic, while the older categories are becoming increasingly white.

Figure 4: 2010 Arizona Age Distributions for Hispanic and White Individuals

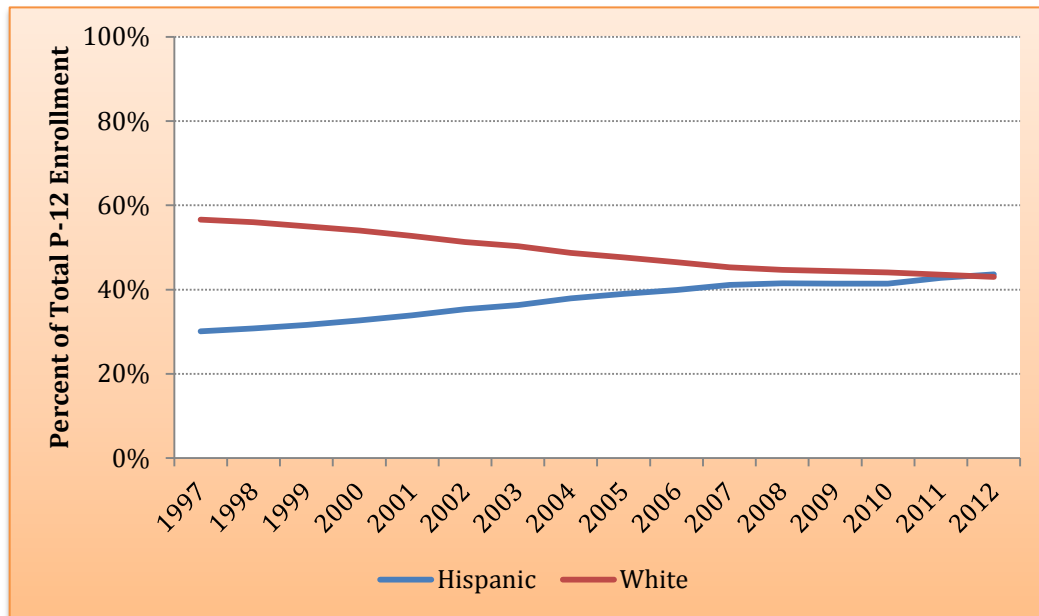


Source: U.S. Census Bureau

While current population figures can be instructive, when looking at the impact of demographic changes on high school graduation rates, it is probably more important to look at long-term trends. It would be a surprise to no one that Arizona's demographic profile has changed significantly in the past decade. Like many states in the American southwest, Arizona is becoming increasingly Hispanic in terms of its population. In the period of time between 2001 and 2010, Arizona's non-Hispanic population grew by 17.3%. During this same decade the state's Hispanic growth rate was 46.3%. Hispanics now make up nearly a third of the state's population and approximately 47% of its children under the age of 19.⁵ Arizona is predicted to be a "majority minority" state within perhaps two decades, and, unless current demographic trends change drastically, a majority of Arizonans will be Hispanic in the not too distant future.

Not surprisingly, this trend is also reflected in public school P-12 enrollment data (Figure 5). Hispanic children now make up the largest racial/ethnic group in grades PK to 7, with the largest differences between Hispanic and White students occurring in grades PK to 2.

Figure 5: Arizona P-12 Enrollment 1997-2012 – Hispanic and White Students



Source: Arizona Department of Education and AMEPAC Minority Student Progress Report (2013)

A look at educational attainment data also contains some troubling facts for a state in which Hispanics will soon be the majority. According to the 2010 Census study, only 10.5% of all Hispanics over the age of 25 have obtained a bachelor's degree, while 63.3% have obtained a high school diploma or less. This last point should not be surprising, given the fact that for the class of 2012, only a little over 70% of all Hispanic students graduated in four years⁶.

The connection between these demographic changes and the state's high school graduation rate cannot be overstated. Arizona is a state in which the single largest racial and ethnic group in schools will soon be students from Hispanic backgrounds. As has already been shown, Hispanic students have lagged behind their peers in obtaining a high school diploma and, without significant changes in the educational system, this trend alone would have serious consequences for the state and its economic health. Unfortunately, demographics is not the only factor at play here. Changes in the global, national and state economies will play an increasingly important role in the fate, not only of students who do not graduate from high school in Arizona, but also of those who do.

Graduation Rates and the "New Economy"

Forty years ago, a student would find it relatively easy to obtain a job immediately upon graduation from high school. In 1973, 72% of all jobs required only a high school education. In fact, nearly a third of all jobs were available to those who had not obtained a high school diploma. Over the past twenty-five years, as a result of economic globalization and the worldwide technology revolution, this situation has changed drastically. By 2007, the percent of jobs that required less than a high school diploma had dropped to 11%. By 2018, it is estimated that only 10% of all jobs in the United States will require less than a high school diploma and only 38% of all available jobs will not require postsecondary education and beyond.⁷

In the state of Arizona, it is estimated that, between 2008 and 2018, approximately 907,000 job vacancies will be created both from new jobs and from job openings due to retirement. Of these job vacancies, 554,000, (61%), will require postsecondary credentials, 231,000 (25%) will require only

a high school diploma, and only 123,000, or 14%, will be available for those who drop out of high school⁸.

During the same forty years that the global and national economies were changing so dramatically, high school graduation rates at the national level have not changed significantly. What has changed, though, are the **consequences** of dropping out of school. If, as has been estimated, within five years only 10% of all jobs in this country will be available to those who drop out of high school, then a significant proportion of our young people will be sitting on the sidelines of the economy. Moreover, the lucky individuals who are able to find jobs without a high school diploma will be earning considerably less than their peers who finish school. Even so, given the fluid nature of modern education, training, and job mobility, a student who works right out of high school or community college will likely need to be prepared to receive additional post-secondary education later in life.

Perhaps an even more compelling fact is that only a little over a third of the jobs will be available for those who only finish high school and do not obtain additional postsecondary training. What these projections may be telling us is that, while high school graduation might be a **necessary** step in becoming a productive and engaged citizen, it might not be **sufficient** in an economy in which nearly two-thirds of all jobs will require additional training or education and one-third will require at least a bachelor's degree or higher.

The challenge for Arizona is clear. If the state is to remain competitive in the new global economy, it must attract and retain the kinds of high-skill industries that pay good wages and salaries to their workers and provide a tax base adequate to fund a world-class infrastructure. In order to do this, it will be necessary for the state's school systems to produce a critical mass of highly trained workers who are both college and career ready when they leave high school. It cannot afford to see nearly a quarter of its young people shut out of the economy and relegated to permanent underclass status. The pace of change in the "New Economy" is accelerating each year. Arizona cannot continue down this path, and required a new definition of what high school means to students.

Arizona's Response: The Arizona Ready Education Reform Plan

Fortunately, Arizona has recognized the critical nature of the challenge outlined above and has taken significant steps to address it. In 2011, Governor Jan Brewer launched the Arizona Ready Education Reform plan and replaced the previous P-20 Coordinating Council with a new education committee in order to begin raising academic standards for Arizona schools.

The Arizona Ready Education Council began work in early 2012 to drive improvement on key educational goals, which were revised slightly in December, 2013. These goals are:

1. Increase the percentage of third graders meeting state standards in reading to 94% in 2020.
2. Increase the percentage of eighth graders achieving at or above the Basic achievement level on the National Assessment of Education Progress to 85% in 2020.
3. Raise the high school graduation rate to at least 93% in 2020, ensuring that all graduates are college and career ready". College and career ready is defined as "entering college without needing remediation or entering the workforce with a job that has advancement potential".
4. Increase the number of students transferring from Arizona community colleges to in-state universities by 40 percent. (need to add the rest of goal)
5. Double the number of students receiving baccalaureate degrees to 36,000 per year.

In order to meet the third goal, and improving the pipeline to the fourth and fifth, in early 2012 the Arizona Ready Council formed the Graduation Task Force composed of leaders in public education, business and human services.

The Graduation Rate Task Force

The Graduation Rate Task Force began meeting in early 2012 with a vision greater than traditional

concepts of drop-out prevention. The group chose to think more comprehensively, and strategically, about how the system could support all students, thus addressing prevention, while still ensuring that those who need additional support and extended, alternative experiences are just as successful as their more traditional peers.

Early on, the task force made the decision to base its recommendations on the 15 Effective Strategies that have been identified by the National Dropout Prevention Center/Network as those having the most positive impact on dropout/graduation rates. The task force met monthly for a little over two years and chose to focus on strategies that the members felt could be most effectively implemented in the state of Arizona.

The result is a comprehensive vision for a redefined high school experience, with an array of strategies and programs that have proven to keep students engaged throughout their PK-12 educational careers and prepared for postsecondary choices.

The components of this vision include: [NOTE TO TASK FORCE MEMBERS: ONCE YOU LOOK AT THE LIST IN THE MORE COMPREHENSIVE CONTEXT, IT MAY NOT SEEM COMPLETE. THAT IS OK. PLEASE COME TO THE TASK FORCE MEETING PREPARED TO DISCUSS WHAT IS MISSING. Also, I have renamed them significantly, but I think you'll still recognize them. -RG]

1. **Early student awareness and planning for a variety of options** including enhanced the CTE/Career pathways conversation between the business world and education. Many of the ideas and concepts surrounding career pathways have been associated with dropout prevention efforts. While this is undoubtedly true, career pathways are becoming increasingly seen by both the education and business communities as a means by which all students can be prepared for success in today's high skills based economy. Whether students are college or career bound upon leaving high school, career pathways and clear programs of study provide the guidance they need to make informed decisions concerning course enrollment, career options and postsecondary training. For potential dropouts, career pathways can provide the relevance that these students need to continue their education.
2. **Early intervention through an Early Warning Data System** focused keeping students on track for graduation. Since many students drop out at the end of eighth grade or during the first few weeks or months of grade 9, the identification of potential dropouts during the middle school years or even earlier is critical. Middle School students who have multiple low or failing grades, poor school attendance, and multiple disciplinary incidents are 75% more likely to drop out of high school¹². A robust system provides links between high school districts/charters, elementary districts/charters and the state's early childhood data system.
3. **Honing in on more specific interest and deepening relevant skills** with academic rigor through a vibrant Education and Career Action Plan (ECAP) system. ECAPs have been used in a variety of adult education and public school settings, and have been found to be an effective tool in keeping students engaged, and in helping them see the relevance of their coursework and other learning activities. Since a perceived lack of relevance and real world utility of some high school courses has been shown to be one major reason students begin to think about dropping out of school, ECAPs should be seen as one more tool or strategy for keeping students in school.
4. **Multiple pathways for core academic credit.** Many students who have dropped out of high school cite lack of relevance or opportunities for "real world" learning as primary reasons for leaving school. At the same time, significant research exists to support the claim that Career and Technical Education (CTE) coursework provides relevance for students who might be questioning the value of the skills and content they are asked to learn in high

school. CTE proponents point to important academic skills already “embedded” in CTE courses, and the need identify additional ones in order to provide students with rigorous alternative pathways to earning academic credits leading to a high school diploma. For students who might be considering dropping out of school due to lack of credits, this might be a means of continuing their education.

5. **Flexible, high quality school options for recovered drop-outs** and create incentives for schools to use them. According to the National Governors Association, “School structure is the greatest barrier standing in the way of schools and districts recovering out-of-school youth”. States wanting to explore this strategy have basically two options: increase the quality of their existing alternative high schools, or afford greater flexibility in traditional high schools for dropouts to obtain the credits they need for graduation.

Outside of the K-12 education system, two key strategies are required to support this vision:

6. **Counteract two major causes of academic failure: summer learning loss and lack of student engagement in school** through the adoption of the Arizona Quality Standards for Afterschool Youth Development (AYD) Programs. Recent research has shown that participation in afterschool youth development programs may:⁹
 - increase school attendance;
 - increase student engagement and motivation to learn;
 - increase the likelihood of graduating from high school;
 - increase and enhance self-esteem and social skills;
 - reduce delinquency, and
 - increase academic achievement in basic academic skills.

Further, students who participate in quality AYD programs tend to be less likely to engage in risky behaviors and more likely to exhibit greater social competence¹⁰.

7. **Higher quality pre-school and early primary school experiences for children.** The National Governor’s Association, has stated,

“To effectively prepare students for college or career training, practitioners, policymakers, and researchers increasingly recognize that all children need a clear progression of high quality learning experiences starting early in life. A growing body of research shows that mastery of foundational cognitive and social-emotional skills from B-3rd grade is particularly important for students’ long-term academic success¹⁸.”

For each of the seven components, or strategies, described above, the task force created a “white paper” or authoritative report. The seven white papers provided information on current research or best practices with regards to each strategy or program, examples of where the strategy had been successfully implemented nationwide, the extent to which the strategy had been successfully implemented in the state of Arizona, and a list of available actions necessary to further the implementation in our state.

What follows is a short summary of each strategy identified by the task force and described in one of the seven white papers, including a set of critical actions that the task force recommends be taken in order to further the implementation of that strategy or program in Arizona, and thereby redefining what high school can be for all of Arizona’s students.

Strategy #1: Early student awareness and planning for a variety of options

Current research and best practices: While many states have begun education-led career path initiatives, only a handful have proved sustainable, and many are in just the first stages of development. And, although a number of states have begun the conversations between education and business/industry necessary for the development of robust career pathways programs, none so far have been successful at implementing a comprehensive statewide partnership for dropout prevention and industry certification¹⁷.

At this time, it appears that the most promising career pathway models are those in which specific industries take the lead in establishing the school-to-work connection. The C-Tech Certified program for telecommunications in New Jersey and the “Go Build” program in Alabama for construction are examples of these industry-led initiatives.

Current status in Arizona: In Arizona, the state’s longstanding CTE/Business and Industry connection has resulted in a number of career path initiatives, including Peoria Unified School District’s model pathways program, MyLife, which develops academic programs of study around clusters. Also, from the education-led initiative side, the Arizona Department of Education has launched a number of partnerships with various industry clusters.

In terms of business-led initiatives, the Arizona Chamber of Commerce has begun a workforce development project designed to link the Arizona Department of Education’s Career and Technical Education section and the Arizona Skills Standards Commission with the Commerce Authority’s “sector strategies” and the Chamber’s own vision of “Southwest Direct”. The partnership has identified manufacturing as the first sector in which to align curriculum and certification with industry needs. The Arizona Manufacturing Partnership will link education and industry to create certificate programs in high schools that will provide the skilled, job-ready workers needed in that field.

The Arizona Skills Standards Commission has been working on the education/industry connection for a number of years. The commission oversees the development of industry-validated certification or documentation of student skill attainment in 71 specific career fields.

While Arizona has had a long history and tradition of CTE connections to business and industry through the fourteen Joint Technical Education Districts (JTED) and the initiatives mentioned above, there still remains much to do in order to bring about the kinds of linkages necessary for career pathways to be available to all students.

Critical actions: NOTE TO TASK FORCE: THESE ARE SHORTENED CRITICAL ACTION LISTS ARE BASED ON PHIL’S INTERVIEWS. THE INTENT WAS TO BE MORE CONCISE AND FOCUS ON THE KEY STRATEGIES TO ACHIEVE THE VISION. PLEASE REVIEW ACCORDINNGLY. -RG

1. Advocate for the ECAP process and career pathway links beginning earlier in a student’s educational career, with 5th grade being a target grade level to start.
2. Enhance career pathways by providing a process by which information from business and industry on career “areas of growth” in the state is made available to schools and school systems.
3. Explore how to increase business/industry involvement in the career pathways process and programs of study by using technology to maximize the use of business community member time.
4. Convene a workgroup of experts to develop a rubric to evaluate the quality of ECAPs

Strategy #2: Early intervention through an Early Warning Data System

Current research and best practices: One important tool to the early identification of potential dropouts is an early warning data system designed to predict, using select indicators, the likelihood of a student to drop out. Research by Elaine M. Allesenworth and John Q. Easton in Chicago and in Philadelphia by Robert Balfanz and Ruth C. Neild revealed that just a few indicators can predict as

early as the first semester of high school whether a student will drop out¹³.

Current research points to three critical indicators that are most likely to identify students at risk of leaving school before graduation: course performance, credit accumulation and attendance. In Chicago, school staff use “on-track” indicators such as the number of failed courses and total GPA to identify potential dropouts. On-track students have been shown to be 3.5 times more likely to graduate from high school in four years than their peers who are not on-track¹⁴. An effective early warning data system, then, should contain, at a minimum, current and past course performance (grades and GPA), credit accumulation, and attendance.

The primary indicator for attendance would be the number of days absent or the daily attendance rate at regular intervals, as early as the first 20 days of the freshman year and each quarter thereafter. A common trigger for the attendance indicator is missing 10% of instruction, or about 10 days of school per semester.

Commonly collected data for the course performance and credit accumulation indicators include:

- Total number of failing grades in all courses
- Total number of failing grades in core academic courses
- Freshman grade point average for each quarter, semester and the year
- Credits earned compared to the number needed to graduate on time¹⁵

Some early warning data systems include information from a student’s middle school years, including low or declining attendance, behavioral issues, and low or declining grades, particularly in the transition years of 6th and 8th grade and retention.

Finally, in addition to the indicators listed above, an early warning data system should include up to date information on the programs available to individual students who are struggling. This information will allow school staff to make a better match between the needs of the student (academic, behavioral, attendance) and the programs and interventions most appropriate for him or her¹⁶. This staff review of data and professional development regarding solutions is the most critical component in the use of such a system.

Current status in Arizona: Currently, information on which school systems use some form of early warning data system is not readily available. Those schools systems in Arizona known to be using some form of early warning data system include Mesa, Scottsdale and the Peoria Unified School District. In addition a number of charter schools have implemented data-driven dropout recovery programs.

Perhaps the most promising development in the state in the use of early warning data involves a partnership between the Phoenix Union High School District, the Phoenix Elementary School District and the Valley of the Sun United Way. The partnership’s goal is to develop a technology system that will provide early warning indicator data to school and district staff. The system will also provide a means to plan and manage student interventions by school staff. The partnership plans to phase in the system by implementing it in individual schools, then work up to district-level status. The pilot will include a professional development module based on a “train-the-trainer” model and each pilot campus will build practice around the use of data for student intervention planning by teams of school staff.

Critical actions:

1. Ensure that an early warning data component is included as part of any statewide student data system.
2. Identify opportunities in the state where the piloting of an early warning data system could best be placed, including districts currently attempting to develop a system and districts with large numbers/proportions of dropouts.

3. Ensure that any early warning system include information on programs and interventions that have been proven effective with potential dropouts and that staff be trained on using the early warning data to select the appropriate intervention.
4. Advocate for chronic absenteeism reporting requirements for School Improvement Grants and Reading Plans submitted to the State Board of Education and other similar opportunities.

Strategy #3: Honing in on More Specific Interest and Deepening Relevant Skills

Current research and best practices: An Education and Career Action Plan (ECAP) is a formal plan and a process that students use to clarify their career goals and refine their postsecondary plans. With support from school counselors, teachers and parents, the ECAP helps students make decisions about the courses and activities they choose throughout high school and beyond. The ECAP empowers students by giving them an opportunity to “be in the driver’s seat” and to plan their education around their specific interests, skills, and aspirations.

Ideally, the ECAP process is begun in middle school and is updated on a yearly basis throughout high school and postsecondary education. Although plans vary from one locality to another, most include the following: academic and career information and goals, postsecondary information and options, and documentation of extracurricular opportunities.

Current status in Arizona: The Arizona State Board of Education currently requires students in grades 9-12 to complete an ECAP with a six-year plan that a parent reviews and signs each year. However, at this time, the ECAP requirement is a State Board of Education policy and is not in state statute.

The ECAP information is stored in the Arizona Career Information System (AZCIS), a subscription service for which the state pays a yearly fee of \$100,000 for unlimited users up to the age of 21. The program is administered by the Arizona Department of Education and is funded through a combination of ADE and private partnership resources. Since funding for the ECAP program is currently not guaranteed from one year to the next, some schools have been reluctant to fully invest in the system, fearing that the time and effort required of staff to develop the ECAP portfolios would be wasted if the data system were to be defunded in the future. In spite of this, the Arizona State Board for Charter Schools has included the use of education and career plans in its performance management planning process as part of the documentation of progress in improving graduation rates.

Other barriers to schools fully “coming onboard” in the use of ECAPS include:

- Lack of available school staff (counselors) time in helping students develop the ECAPS
- Lack of expertise by staff in developing the ECAPS
- Lack of information about the benefits of ECAPS to schools and the business community
- Lack of information on the extent to which ECAPS are being developed and used in schools
- Lack of Arizona Department of Education staff to fully develop integration tools

Critical actions:

1. Develop and implement a comprehensive communications plan to help all stakeholders, including parents, the business community and higher education to understand what the ECAP program is and why it is important.
2. Recommend to the Governor that the ECAP program be designated as a budget priority for state funding or develop a consortium to assure continued funding of the program.

Strategy #4: Multiple pathways for core academic credit

Current research and best practices: The National Research Center for Career and Technical Education has stated that the key to embedding academic rigor in a CTE course is to think of the

course as neither a core academic nor a CTE course, but rather as a “Core Academic Area-in-CTE” course. An example of this is the “Math-in-CTE” course that is becoming common in many school systems.

The Association for Career and Technical Education (ACTE) identifies two methods of creating CTE courses for which a student could earn academic credit. The first is a hybrid method that fully integrates academic and CTE in such a way that the course counts for both an academic and elective CTE credit on a students’ high school transcript, resulting in the student earning two credits. The second method is the classification of a CTE course that meets academic credit requirements for graduation as a course eligible for full or partial credit toward high school graduation. In this case, the student earns only one credit.

Current status in Arizona: The ACTE lists three key factors in the successful implementation of a program in which a student can earn academic credit for CTE coursework:

1. Develop a systematic approach for course approval
2. Address the Highly Qualified Teacher requirement now necessary for core academic courses
3. Secure “buy in” from all key stakeholders

With regards to developing a systematic approach for course approval, the Arizona Department of Education (ADE) has created guides for local school boards to use in making the determination as to which CTE courses should be eligible for academic credit. In 2009, the ADE developed Math-in-CTE program standards “crosswalks”, which link academic math standards to the standards and measurement criteria associated with the CTE program. Now, a number of other CTE programs also have program standards crosswalks. The Pima County Joint Technical Education District (JTED) is also involved in the process of aligning core academic and CTE standards.

The Highly Qualified Teacher issue is somewhat more problematic and currently limits the number of teachers available to teach the CTE courses for which core academic credits can be earned. The entire issue of just what constitutes a “highly qualified” teacher needs further clarification.

Despite the Highly Qualified Teacher hurdle and a few other barriers, there appears to be growing support from stakeholders for the strategy of allowing students to gain academic credits from CTE coursework. Both the State Board of Education and the Arizona Department of Education have listed this issue as an area of focus.

Critical Actions:

1. Advocate for the continued development of program standards “crosswalks” linking core academic skills with CTE course content
2. Facilitate local school board approval of CTE courses for core academic credit
3. Advocate streamlining the Highly Qualified Teacher process through the Arizona State Board of Education

Strategy #5: Flexible, High-Quality School Options for Recovered Dropouts

Current research and best practices: Reengaging and recovering students who have already dropped out of high school has been a challenge for public school systems within the state of Arizona and across the country. Our state, like many others, is looking for guidance on building effective policies and programs that provide “on-ramps” back to school for dropouts who want to obtain a high school diploma or its equivalent. A key source of information on best practices in this area is an issue brief on state policies to reengage dropouts released by the National Governor’s Association Center for Best Practices in 2001.²³

States wanting to explore this strategy have basically two options: Increase the quality of their existing alternative high schools, or afford greater flexibility in traditional high schools for dropouts

to obtain the credits they need for graduation. For the first option, it is critical that states address the issue of quality by enacting necessary accountability measures, setting and maintaining high expectations for all students, regardless of school setting, and aligning curriculum in alternative schools with local, state and national academic standards.

To achieve the second option, states will need to consider restructuring their traditional high school systems to allow for greater flexibility in how course credits are earned in order to accommodate the needs of recovered dropouts. Flexibility in this sense means providing ways for students to earn credits that are not based on “seat time” or the amount of time spent in the classroom. These might include the student demonstrating mastery of course content via high quality authentic assessments, internships, distance learning, virtual schools, independent study, or community service. In fact, these options should be considered for ALL students.

The NGA also considered incentives to focus on dropout recovery to be an important but relatively high cost, at least compared to the others outlined in the document, but effective in “jump-starting” a state’s dropout recovery efforts. States considering this strategy have essentially two options: restructuring the state finance system, or targeting additional resources. For the first option, a state would need to restructure their education finance system to provide additional resources to school systems based on the number of at-risk students and recovered dropouts. For the second option, a state could target additional resources, provided they are available, to dropout recovery by raising the maximum allowable school attendance age or by creating incentive grant programs that target overage dropouts.

Current status in Arizona: Arizona has already addressed the NGA’s first recommended action, that of setting a statewide goal to reduce the dropout rate. In 2010 Governor Jan Brewer adopted the Arizona Ready Education Reform Plan, one aspect of which includes a goal to increase the state four-year graduation rate to 93% by 2020. The Arizona Ready Education Council monitors progress on this goal through the Arizona Online Report Card and can disaggregate graduation rate data by ethnicity, migrant status, economically disadvantaged status, and special needs. The current system can also disaggregate by county, and plans are underway to expand the level of analysis to the school district level.

Arizona is home to a quality alternative high school community, and is a state in which school choice and flexible open enrollment are available to parents and students. Some alternative schools are parts of traditional public school districts, while others are authorized by the Arizona State Board for Charter Schools (ASBCS). Both the ASBCS and the State Board of Education have been working to identify the appropriate accountability tools to ensure that all alternative high schools are of high quality.

Currently, Arizona’s school finance system includes a weighting system that provides additional resources for special education students, students from economically disadvantaged families and for high school students. However, at this time the weighting system does not include overage students or those who are behind in credits.

Critical actions:

1. Advocate for the development of a data system, similar to that used in New York City, to identify students who have left school without a diploma and to target resources necessary to support dropout recovery.
2. Advocate for the addition of dropout prevention weights to the state education funding formula and help schools with low graduation rates gain the awareness that dropout data will be used to allocate additional resources, rather than penalize schools with large numbers of high-risk students.
3. Restructure traditional high school systems to allow for greater flexibility in how course credits are earned.

Strategy #6: Counteract two major causes of academic failure: summer learning loss and lack of student engagement in school

Current research and best practices: For potential dropouts, quality AYD programs are playing an increasingly important role in counteracting these two major causes of academic failure.

While educators and community leaders are convinced of the effectiveness of quality AYD programs in helping keep students in school, there is less agreement about what “quality” means in this context. At this time, there are no national standards for assessing the quality of services provided by the numerous out-of-school time programs serving children and young people across the country.

Current status in Arizona: In October, 2013, a statewide committee led by the Arizona Center for Afterschool Excellence and the Valley of the Sun United Way, in partnership with a diverse, representative membership from youth development program providers, policymakers, state agencies, school systems, funding agencies and others released a publication titled “School’s Out, Make it Count: Arizona Quality Standards for Out-of-School Time Programs”. The voluntary standards contained in the publication were designed to “. . . support out-of-school time program providers’ reflection on where they are now, opportunities for growth, planning with quality in mind, and measuring success and outcomes for youth” and “. . . foster continuous improvement in a variety of programs across the state of Arizona.”¹¹

The new statewide quality standards focus on seven areas: safe and healthy environments; positive relationships; intentional programming and activities; equity and inclusion; family, school and community engagement; program management; and program evaluation and data.

Critical actions:

1. To Be Determined (telephone interview not completed at this time)

Strategy #7: Higher quality pre-school and early primary school experiences for children.

Current research and best practices: The linkage between early childhood learning and later success in school has been shown repeatedly in research literature on dropout prevention and postsecondary education and workforce readiness. Many organizations have cited this research while advocating for higher quality pre-school and early primary school experiences for children.

In spite of this, most states have not begun the task of creating a coherent learning pathway beginning in early childhood and culminating in the acquisition of critical early language, reading and mathematics skills by the end of grade 3. Often, the fragmented nature of state administration and policy leadership for early childhood and K-3 public education programs have made the articulation of learning standards, assessments and teacher qualification criteria difficult, if not impossible. Without this articulation, children come to their first day of kindergarten in varying states of readiness, depending on their early childhood experiences. Children who are prepared when they enter kindergarten consistently outperform their less prepared peers academically by grade 3.¹⁹

While the attainment of academic skills is important, other, non-cognitive, skills are also critical to success in life and work. Children who learn early how to motivate themselves, work with others, maintain focus, self-regulate behavior and maintain good mental and physical health are more likely to succeed as adults. These are all skills that can be learned in quality early childhood settings and reinforced in the first years of primary school.²⁰

Current status in Arizona: Arizona faces challenges related to young children’s preparation for early grade success. These include:

- Only 10% of the infant and toddler learning programs in the state have national accreditation, and only 20% of the early learning programs are enrolled in Quality First, Arizona's quality rating and improvement system²¹
- Arizona currently ranks 49th, nationwide, in the percentage of children ages 3 and 4 attending preschool²²
- At this time, there is not a consistent, statewide screening instrument for early childhood programs, nor a system for tracking screening outcomes and referrals
- Arizona does not currently have a common, statewide screening or entry assessment for children entering kindergarten

Arizona currently has a number of organizations and programs working to improve the accessibility and quality of early childhood and early primary school programs in the state, and in the articulation of learning standards and professional qualifications for program and school staff. These include:

Organization	Focus
Arizona Ready	Statewide education reform that includes early childhood/early primary within a P-20-Workforce continuum of support
First Things First	Expanding access to early childhood supports; creating synergy among state agencies and departments, demonstrating public will for change
Build AZ	Developing stakeholder support for the development of a birth to 8 early childhood system
Read On Arizona	Implementing a statewide plan to create a continuum of support for early literacy
Arizona Department of Education	Completed work to align early learning standards, infant/toddler standards and Head Start standards with Arizona's Common Core academic standards

Critical actions:

1. Support the development and implementation of the Arizona Kindergarten Development Instrument (KDI) to assess the readiness of children for Kindergarten and to support individualized instruction for students enrolled in Kindergarten programs.
2. Ensure high quality, voluntary early childhood programs are available to all 3 and 4 year olds in the state of Arizona.

Conclusions

It is now three years since Governor Brewer set the goal of raising the state four-year graduation rate to 93% by 2020. From 2006 to 2012, the last year for which data is available, the rate increased by approximately 8 percentage points. Even if, in the next 7 years, this trend were to continue, the 2020 figure would still fall well short of the council's target. It is obvious that additional measures will be needed in order to meet the goal.

The strategies identified by the Graduation Rate Task Force and outlined in this document provide a solid first step in making the changes necessary not only to raise the on-time graduation rate, but to address the second part of the Arizona Ready goal, that of ensuring that all students are "college and career ready". While many of the strategies the task force identified have been successful in keeping students in school, or providing students who have dropped out with a way back into the educational system, they are also ones that have the potential of helping all students be more prepared for postsecondary education and employment. Certainly, quality early childhood and early primary

grade experiences can affect every student, as can enhanced career and educational planning through an Education and Career Action Plan. Taken as a whole, the seven strategies can be seen as a comprehensive set of interventions, resources and services that, while addressing the critical issue of school dropouts, also serve students who are not considering that option – thus redefining the High School Experience for all students.

The demographic trends and economic changes that have swept the state of Arizona in the last two decades are not likely to reverse themselves. Nor is the pace in which these changes have occurred likely to slow. The stakes involved are too high for indecision or inaction by government, education or business. The work of the Graduation Rate Task Force has provided us with a map for moving forward.

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